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RELIGION AND SCIENCE:

THEIR INDEPENDENCE OF EACH OTHER,

AND

THEIR MUTUAL RELATIONS.

BY A PHYSICIAN.

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“There is in truth no opposition nor inconsistency between Religion and Science, commonly so called, except that which has been conjured up by injudicious zeal or false philosophy, mistaking the ends of a divine revelation.”—BISHOP BLOMFIELD, *at the opening of King's College, London, 1831.*

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THEIR INDEPENDENCE OF EACH OTHER, AND THEIR
MUTUAL RELATIONS.

OF all the subjects that can engage the attention and study of the human mind, those of revealed Religion and the natural and physical Sciences must be considered the most important in every point of view. The one directs the faculties of our mind to the loftiest and the purest of contemplations, while it creates within us the most humiliating emotions regarding ourselves; and the other enlarges the sphere of our observation, exercises our reason, ennobles our intellectual conceptions, and elevates us, in some measure, to the capacities and enjoyments of an order of immortal beings superior to ourselves. So important and paramount have these two principal subjects for human thought and interest been held, that they have, from their respective grandeur and importance, been at times considered as rivals to each other. A full and ardent dedication of the mind to the study and pursuit of the one, has been averred to derogate of necessity from the honour and estimation in which the other should be held; and that two such sublime temples cannot, in any corresponding manner, command the honest and righteous worship and attention of the intellect and heart of man.

This opinion of the necessarily dissevered allegiance, that we are driven to maintain towards these two leading spheres of human thought and study, has carried some timid spirits, who are over jealous for the rights and supremacy of the more sacred pursuit, to denounce the study and acquisition of science as injurious to the doctrines and the progress of religion; while, on the other hand, the ardent devotee of science has been sometimes led to think that the dogmas of religion, or rather their interpreters, have fettered his progress, if not altogether condemned his researches into nature, as presumptuous and sinful. The opprobrious terms of sceptic and bigot have been thus bandied gratuitously about by men of eminent talents and distinguished piety—from motives in some not altogether sincere, but in others from a too zealous affection for that sphere of study and research which they more devotedly have embraced, or in which they have the more distinguished themselves. There is another class having well informed and eclectic minds, who are affected with a strong love of science, and eminently devote themselves to its pursuit, but, at the same time, are imbued with much religious feeling, and are desirous to promote the study and development of both religion and science. They attempt the task of showing, and often consider they have accomplished the perfect accordance between these two leading departments of man's study, research, and contemplation. The accumulative truths of natural and physical science they cannot but receive; but as they sensitively presuppose, or think they perceive, that many of these irresistible truths and phenomena are at some variance with the facts and historical events, as recorded and revealed in the Scriptures, and as literally understood, they either restrict themselves to make the truths of science the buttresses and ornaments of natural religion, or they apply themselves to give that version to those relative passages in the sacred record, which may best accord with the facts and discoveries of human knowledge. As examples of this logical and overweening talent and in-

dustry, may be cited the celebrated *Natural Theology* of Dr. Paley, and some of the *Bridgewater Treatises* — not to overlook the several ingenious attempts of other authors — to correlate the Mosaic history of the creation of the world with the late discoveries in geology.

It is the endeavour of some such ambitious, yet intelligent minds, to construct, prematurely, an edifice that may reach to heaven, from the moulded materials of both religion and science — a block of the one, along with a fragment or an ornament of the other, dovetailed and cemented with each other, to the very top of the pile, has often made the whole fabric, when critically examined, incongruous and unsatisfactory, if not insecure. By this anticipated construction, science has not been promoted; and, assuredly, true religion has not been made more prevalent, nor rendered more pure. It is not that religion and science are of themselves in the least antagonistic in their studies or in their aims, nor are their parallaxes different to rational and contemplative minds, but it is in failing to consider them in an applied and practical view, as being, in a great measure, independent of each other, in their objects and pursuits. The one concerns man solely as a rational and accountable being, destined for immortality; the other only aims at the expansion and improvement of the intellect that God has given him for elevating and ennobling his mortal existence. So distinct and irrespective of each other are these two great and paramount subjects of human concern and study, that it may be confidently averred that no study of, nor devotion to religion, will make a man an astronomer, a natural historian, nor a geologist; neither will the profoundest acquaintance nor proficiency in these sciences discover to man *the* God of heaven and earth, though a contemplative view of, and an industrious research into the works of nature, may lead his mind from nature up to *a* God of nature.

In thus assigning a certain independency between religion and science, so far as the facts and phenomena of the one

can give no support to the sublime truths of the other; nor can the blessings of revelation afford any real aid in the pursuits and discoveries of science; there is yet a correlation, which renders the legitimate and progressive pursuit of both deeply interesting, ennobling, and beneficial to the physical, moral, and intellectual constitution of man.

THE INDEPENDENCY OF RELIGION.—Religion is much more independent of science than science is of religion. It may and can do everything for man, both for his eternal interest and for his good in his present state, from the moral injunctions it conveys. Religion may reign, with much intensity and fervour, in the mind and heart of the very humblest child of science — yea, in him, who knows not the most commonly received truths of the Copernican Astronomy. Religion depends neither upon observation nor induction; it is an indwelling perception of revealed truth, corroborated by intellectual conviction, and confirmed by experience in the heart of man. It requires no light from the telescope, no logic from the schools, nor a demonstration from Euclid or the *Principia*, to establish its facts and arguments. It may and does shine forth as brightly in the cottage as in the palace, and be as deeply cultivated by the shepherd on the mountain side, as by the most learned in the college or the cloister; and though “it is hidden often from the wise and prudent, and revealed unto babes,” yet it contains subjects of sublime thought and wonder, which are beyond the powers of the most profound philosopher to solve. The Christian religion thus stands independent within itself, animated by its own heaven-born essence, and wrapped up in its unassailable panoply; while it is adapted for the poor equally with the rich and the noble, for the simple as well as the wise. It can receive no support from science, and must not go out of its way for it. “She stands on her own ground, has her own laws, and is her own reward.”

THE INDEPENDENCY OF SCIENCE. — Having so far stated what is considered the independent life and condition of revealed religion, we will now proceed to set forth the independency of Science, as it embraces the pursuit and study of the facts and phenomena of the material universe. In discussing this other grand department of the human faculties and powers of observation and reasoning, we venture to claim for it also a clear and untrammelled sphere of study and action; and while religion must not go out of her way for science, neither must science go out of its way for religion. It is our study, however, where these two independent systems seem to differ, for us to believe that they are perfectly reconcilable, by a fuller knowledge of them both; and that we are not to clip the truth, in order to make it agree with a dogma or a doctrine.

History furnishes us with many instances, from Socrates down to Galileo and others of later times, of the inconsiderate war that has obtained between the blind and tyrannous assertors of false doctrine, and the discoverers and promulgators of natural and physical truth—arising from the erroneous notion that religion is the sole dictator, as well as being the repository of all truth, physical as well as moral. Such a bigoted zeal puts on a sort of senseless dread, lest men by searching may find out an *unknown* God, and that the gates of heaven may be attained by exploring the outer boundaries of the universe; or lest by diving into the hidden caverns of this globe, the unhallowed explorers may fall, as they deserve to fall, into the gulph of perdition, and not seek to attain the one object and avoid the other issue, by following the only means which doctrine points out and enjoins. Though this fear and hatred of the truth and study of natural and physical science were principally felt and displayed during the dark ages of European history, they are not yet entirely extinct in this enlightened era. Instead of arrogating the dogmatic right and power of extinguishing, with pains and penalties, the feeblest light that enlarges the prospect of nature's works and won-

ders, these harsh and wicked sentiments have put on the less severe characters of discouragement and disesteem. Persons, prepossessed with these encrusted feelings and views, appear to consider the truth secular to be opposed to the truth revealed, as if the Great Lawgiver of both could be in opposition to Himself.

This opposition and discouragement to the spread and progress of science arise, in some instances, it must be granted, from a sincere but a mistaken alarm, lest the truths of Christianity may be endangered by the pursuits of those minds who aspire to know more than what is written for them; and that the ambition and acuteness of those who search deeply into the arcana of nature, will induce the same to apply the line and the calculus to the dogmas of Christianity, and thence impeach their truths and their obligations. This shortsighted alarm has led several teachers of religion, and others, men of eminent piety and virtue, to denounce the proficient in science as a semi-infidel, and his works to be abjured as heterodox — deeming them, from what may be inferred, both from their sayings and their silence, that such works, whether in books or lectures, are more to be shunned than a gin palae or a beershop, as being injurious to morals and religion. There are some others, in these times, whom we cannot altogether acquit of having a little leaven of envy mixed up with their discouragement of science, arising from a consciousness that they are far behind the current knowledge of scientific truth and discovery, however well versed they may be in classical and polite literature. It is an old remark, that what we do not possess nor can easily acquire, we are apt to undervalue, if not condemn; so persons of this esoteric and depreciating spirit, while lagging behind in the sluggish eddies of the schools or of old prejudices, behold the barks of progressive science earceering down the middle of the stream of time, with sentiments partaking more of hostility or of envy, than of sympathy and encouragement.

Having thus bespoke a character of independency for

science, irrespective of any aid from religion, we shall proceed to notice, in a very short manner, what science has done, or may be able to effect, and what it has not done, and cannot do.

Science, or the knowledge of natural and physical facts and phenomena, has revealed unto man such discoveries of the elements and operations of nature — both belonging to the globe which he inhabits and the universe around him, that he is repeatedly lost in wonder and admiration at the very discoveries he has made, and he almost hesitates to lay his trembling hands on the elements and forces which he has evoked, and now lie prepared for action at his command. At each step of his progress into the arcana of nature, he finds his mind more and more elevated and refined; and as the sphere of his knowledge extends, so does his ambition to penetrate a still wider circle of the yet undiscovered truths of nature urge him to further researches. Truths opening up after truths, like the dawning light leading to the brighter day, serve to keep his vision steadily and hopefully directed to the unexplored and mysterious world before him; while he may consider all the discoveries which he has hitherto made, and lie behind and around him, as “but a few pebbles picked up on the great shore of time.”

The acquisition of such an amount of knowledge as is displayed in Humboldt's *Cosmos*, either from original discovery, or derived from the labours and teaching of others, is surely a possession of great price and of wonderful achievement; when we consider the being, that may be gifted with the power and the possession of it, from the day he was puling in his nurse's arms till he is laid a lump of corruptible matter in the grave. To think that this being, when clothed with mortality, and subject to many evil passions, infirmities, and diseases, was the tenement of a mind that could, while so imprisoned, travel to the utmost bounds of visible space, and there mark out the line of path and the manner of progression of each orb in the heavens, and even of those orbs that had

hitherto been invisible — could penetrate into the elemental constitution of organic and inorganic nature, and there take measure of their atoms and laws of combination, and could, from the thunder cloud and the metal from the mine, enchain and develop a power as subtle almost as thought, and make it subservient to the use and happiness of his fellow-men. Surely such powers and faculties in such a perishable creature are enough to excite man's highest admiration, and yet withal his deep wonder and awe. It is, therefore, mysteriously impressed on the thinking portion of mankind in all ages, that such transcendent gifts and faculties are not doomed to perish with the dust that gave them a local habitation and a name, but that they of themselves lead to the belief, that the mind of man is immaterial and immortal.

Besides this exalted and spiritualised view of the nature and destiny of the human mind, we perceive and experience the ennobling and refining tendencies of scientific researches and studies on the moral constitution and the physical well-being of man. By them his tastes and habits are chastened and refined, and those passions that place him on a level with the brutes that perish are subdued and regulated; while the beautiful order and perfection of design which he sees everywhere in nature and in her laws, lead him to consult order and organization in his family and in society around him. Not to enlarge, in this place, on the surpassing benefits that have been conferred on man's physical condition from the gifts and application of science,* a higher result may still reward and accompany the explorer and student of the truths and phenomena of science. He may be led, if it were possible

* The writer has thought it superfluous, in the course of the context, to mention any special objects of science and discovery, as they may all be recognised, where allusions are made, by those who are generally acquainted with the state and progress of knowledge. It may, however, be noted, that the calculated discovery of the planet Neptune, the invention of the electric telegraph, and the anæsthetic application of chloroform, are three of the most remarkable of late things that have taken place in human discovery and invention.

he could be previously ignorant of all knowledge of a revealed God, to trace out the existence of an unseen Creator, from the works and operations which he everywhere witnesses in the kingdoms of nature. Impressed with this sublimer conception, the true philosopher will, notwithstanding, pursue his legitimate path of investigation and study, without venturing to decide on the final causes of what he has ascertained, or dogmatically lay down a code of laws for the government of the phenomena he has witnessed, or may be inferred by him to exist. Within the authorised and independent sphere of his studies and researches, he has an illimitable scope for the exercise of his most attentive and arduous intellect; his pursuits and discoveries have their own reward in the expansion of his mind, the improvement of his moral being, the benefit to his fellow creatures, and in an honest and honourable fame to himself, not only in the age in which he lives, but in times long after him.

It must, however, be remarked of those higher orders of intellect, whether engaged in the successful pursuit of exploring the structure and mechanism of the heavens, in the investigation of the recondite constitution of organic or inorganic matter, or of the powers and habitudes of the imponderable agents of nature, that to them the conclusion may be inevitable that they are dealing with the handywork of some invisible Being, wonderful in power, wisdom, and adaptation. They may, therefore, be said to have worked up through nature unto nature's God, and so have founded the great pillar of Natural Religion. But this is a giddy height for the aspiring mind to have attained, and some have not resisted, but yielded to the delusive pride which such an elevated position has sometimes engendered. The God, whom they think they have discovered, appears to them like the successful solution of a mathematical problem, and, being a discovery, if not a creation of their own intellectual powers, they venture further to clothe this *idolum mentis*, or eliminated being, with those attributes which they think the most appropriate to

his character. Some, who are imbued with a more sublime and reverential view of not only the power but of the personality of this invisible Agent, whether discovered from their study of nature, or from their theoretic notions of the necessity of a First Cause, have wisely attributed to him not only the first arrangement of the material world, but also the primary and successive formation and the subsequent upholding of all living beings; though none, as far as we are acquainted, have assigned to this God of nature the creation of all things out of nothing. Others, again, looking down from the proud yet dangerous summit of their philosophy, and beholding the continued and invariable arrangements and evolution of the course and phenomena of nature, have limited the office of the Great Unseen to the impression of forces primitively on the inorganic world, and to the direct creation only of the original types of animated nature—leaving them to be developed, in the progress of time, into all the succeeding forms of being, by the innate power of those laws which were originally impressed on the generative atoms, without the Creator afterwards adding to, superintending, or interfering with any of the operations and productions of universal nature. It need scarcely be recollected, that the study of the various facts and aspects of nature among the more enlightened philosophers of the heathen world, led them to believe in the existence of “gods many,” instead of One all powerful and omnipresent; and even the observation of energetic life and action throughout every atom of animated and brute matter, led some of them to the deduction that the globe itself was the sole residence of an all-pervading and incorporated being; while each sphere of the heavens was the habitation of some independent and presiding divinity.

Having thus very summarily noticed what natural and physical science has done and may do, under the rational process of inductive knowledge and research, as well as what its study may lead to, under an enthusiastic and delusive reliance on the plastic power of the human mind, we will

now proceed briefly to consider what science, by itself, *cannot do*. It must be remembered, that so far as the subject has been, and may be discussed, natural science is considered entirely as an objective study for the powers and faculties of the mind, and is to be held irrespective of any moral conviction or impression within our hearts or feelings, to aid or correct the questions under review.

As has been said, science can receive no aid from religion, neither can it eliminate or evoke a system of religion that is suited to the condition, wants, and destinies of man. Before, however, we speak of some of its interesting relations to revealed truth, we shall shortly notice some of its short comings. Science, however exalted and refined it may be, serves only to build up man great, wise, and good for this world; but as he is destined for eternity, he must look for something more to ensure his future happiness, than the gratifying solution of the most difficult or the most beautiful problem in nature. The study of the facts and laws of nature, as they are called, we may repeat, may lead man to comprehend the distances and movements of the whole visible heavenly bodies in their several times and orbits—so regular and uniform, that he is himself astonished at the scope and powers of his own mind in resolving the several phenomena. He may, and has dissected the misty and vapoury nebulae of the heavens into formal groups and systems of stars, all obeying an order of laws which he has discovered; and, moreover, he has detected the existence and calculated the path, as has been alluded to, of some planets, long before they were even seen by the eye of man, aided by the most powerful telescope. Well may it be said, that it is next to impossible that such sublimely gifted minds can die; but, after all, if the “bright and morning star” may not in the course of such celestial pursuits be discovered, nor accompany the path of the gifted philosopher, this science, however exalted and ennobling, will return to the earth from which it sprung, and its talented possessor will have failed to secure a seat in

those empyreal regions of which the visible heavens, the sphere of his labour and his fame, are but a type and a shadow.

In the region of geology, science may penetrate still farther than she has done into the bowels of the earth, even towards the primitive nucleus, until the central heat forbids man's further approach. The repositories of the precious metals, whence they are sublimated to the surface in various parts of the world, may be laid open, — the incumbent strata may be more clearly and chronologically defined, than they have yet been, — while the vestiges and remains of extinct life that are treasured up in the various envelopes of the earth, may be fully unfolded to the research and zoological grasp of the student of nature. All this may be done, and even the mighty agency of a creative and destructive power preparing the earth for man's abode, may be so manifested as to impress the reasoning mind, that there is a God that maketh and ruleth the earth, — and yet the "rock out of which we are hewn," and the "pearl of great price," will still remain undiscovered.

So likewise in the animal kingdom, science may still add to the present fauna, by the discovery of fresh species of living beings, analyse more completely the organs of sense and motion, and may even particularize in a more intelligible manner one embryo-cell from another, and show the yet undiscovered distinction between a vegetable and an animal one. She may even solve the problem of the union of vital force with matter, but still her utmost researches into the microscopic anatomy of our own bodies, and into the functions of their minutest organs, (on the more obvious of all which Dr. Paley founded his chief arguments of a Creator and Great Designer) will all equally fail to discover to us a page of "that book wherein all our members are written" "when as yet there was none of them:" nor will all our researches teach us how we became the poor victims of disease and corruption, though we may arrogate to ourselves when living, the form and attitude divine. In the other

kingdom of nature, the form, function, and habits of every tree, fruit, and flower on the surface of the earth, may be known and classified by the botanist — all declaring to him the grandeur, richness, beauty, and beneficence of nature, and yet he will not be able to specify the “Tree of Life,” for to sit beneath its shade, when his feet are weary and his heart begins to fail.

Such being some of the isolated positions and functions of true religion and science, we naturally wish to bring such noble and dignified objects of man’s attention, study, and interest into harmony with each other; for we rest convinced there is no natural nor essential antagonism between them, however separate and independent their objects and aims may be. Truth secular can never be in opposition to the truth divine; though the ambitious, yet impotent reasonings of some minds, will prematurely bring them into a forced agreement, or put them into a gratuitous state of repulsion. True religion being founded on faith and tradition, is one while made to yield, in the case of any apparent incompatibility, to science, which is based on the evidence of the senses and experiment, and therefore held uncontrollable; while science, on the other hand, is feared or discouraged, lest its facts and deductions should impugn the truths that are revealed. Others, on the side of science, more confident and metaphysical in their views, assert the ascendancy of science, not only from what is seen but from what is not seen, to contain sufficient evidence of the existence and attributes of a God, worthy of our wonder, adoration, and praise.

As was formerly remarked, all of these views are too constrained or too arbitrary; they serve to fetter or disturb the study and pursuits of both religion and science, or else they lead to unprofitable presumption; for we hold it as true in theory and experience, that religion is not intended, nor will it teach a man science, — neither will science, however pure and exalted, teach him religion. What is called natural religion may be deduced, upheld, and refined by the researches

and cultivation of science; but what is this creation of man's intellect, when compared with that body of truths and laws revealed by God Himself? The discovery of a Creator, with the high attributes of mighty power, wonderful design, and even of goodness, which are found displayed in His character by the deep and thoughtful student of natural science, is apt to lead him to an overweening estimation of his own intellectual powers — in that he has been able to evoke a divinity in the course of his researches and reasonings, who, but for them, might have remained unknown to himself, or had even His existence disputed. At any rate, the evidence of the existence and character of such a Being would remain hidden, as it were, from the great majority of the world, who were either not able, or not willing, to appreciate the data on which the more gifted reason and industry of the few had come to the lofty conclusion.

Dr. Paley has indeed said, "the true theist will be the first "to listen to any credible communication of Divine knowledge;" and Boyle, in his *Christian Virtuoso*, says, "Natural Religion, as it is the first that is embraced by the mind, "so it is the foundation upon which revealed religion ought "to be superstructured, and is, as it were, the stock upon "which Christianity must be engrafted." Notwithstanding these propositions and similar others from some eminent theological writers, it may be questioned whether the inward convictions of a man's own heart, and the teachings of his conscience, have not prepared a more ready reception for revealed truth, than all the researches that have been made into nature and its wonderful and suggestive phenomena. This, we think, may be advanced, without any disparagement to the cause of science, or acceding in the least to "that "ignorant conceit that enquiry into nature will make men "atheistical." Science is the gift, or in the possession of the few; while moral convictions are in the hearts of almost all men.

The pursuit and study of natural science has been, perhaps,

accompanied too much and too rigorously by some very conscientious minds, with an obligation to mark out the footsteps of a Creator and Governor, at every stage of the investigation, and to show forth this elaborate work of talent and reason as the successful result of their researches. This sentiment in the investigation of the works of nature has seemed, at times, to proceed from a kind of constrained responsibility, that it was incumbent to prove the existence and agency of a God at every step, though assuredly such moral watchfulness and obligation could not promote the progress of natural science. Man, it would often appear, has more satisfaction and pleasure in finding out a God by and for himself, by proceeding from the study of nature up to nature's God, than with the teachableness and humility of a child to believe what God has revealed of Himself. To find the elaborate solution and abstract reasonings of his own mind, which in their conclusions invest him with an intellectual superiority, to be anticipated in a more direct and positive way, by an exercise of faith in a divine communication, is both humiliating and repressing to the human heart and intellect. Man, in suffering this discomfiture to his self-complacency, would seem to forget that if it had not been for the wide diffusion of a revelation from heaven in the first age of the world and at the commencement of our era, he would, in all probability, never have been able, unaided and unprompted by the distant light of this revelation, to have worked out, as he has done, the glorious problem of an all-powerful, all-wise, and beneficent Creator.

The man who, in the study and pursuit of natural science, neglects to take the book of revelation in his hands, or ignores its proffered intelligence — who God is, and that all things seen, or which can be sought out, were made and ordered by Him, seems to act like the visiter to an establishment of multifarious and ingenious machinery, all moving in regular and beautiful operation, who endeavours to find out the maker and owner of all he surveys, from examining and studying the

various structures and movements displayed before him, when he is, at first approach, offered immediate access to the fabricator and head of the whole establishment, who will at once tell him, "I made all that you see here; it is I that keep all these things in order and motion." Or he may be compared to him who visits an ample garden and shrubbery, all laid out in the most tasteful style, and stocked with the rarest and most beautiful plants and flowers, and, in his opinionative endeavour to find out for himself who the landscape gardener and botanist is, that framed and cultivates the whole assemblage, begins a process of deduction and reasoning from the genius and culture manifested, in which process he may make many mistakes — instead of at once going to the chief gardener, who will cheerfully and generously tell the enquirer that he alone is the proprietor and designer of all within the precincts. So in the analogy of far higher and far more important inquiries, we had better take the Author of all things at His word; and instead of reasoning, as a late writer, Dr. Candlish, says, from nature up to nature's God, "let us rather descend from God, while we are viewing and examining the works of nature" — "not to hear the creation speaking of the Creator, but to hear the Creator speaking of the creation."

In this more direct way of studying the works of nature, we are accompanied with a Being, who stands towards us as a personality, independent of all our researches and reasonings; and not as an abstraction, however perfect and sublime, but which, after all, is only the offspring of our own deductions and arguments. In the one case, at the very best, we have to do with an ideal creation of man's more exalted intellect — the character of which resolved Being, for extent and mode of power, wisdom, and goodness, will depend altogether on the deductive talents and conceptions of the philosopher; but in the other case, we have to do with a revealed One, who has declared Himself the Author and Governor of all things, visible and invisible.

In the study and pursuit, then, of natural science, and with "our eyes seeing Him, of whom we" otherwise "hear of only by the hearing of the ear," we carry on our researches into the facts and phenomena of nature, not with the view of finding in them proofs of the existence, power, and wisdom of a Creator, but rather look upon them as manifestations of the one eternal Power and Godhead, by whom all things exist and are governed.

Thus the Christian religion assumes an encouraging relation to science; for while the latter proceeds in its bright and arduous path, in the legitimate exercise of powers and faculties granted to man for his use and benefit, she does not needlessly encumber herself with drawing up proofs, at every step, of the power and wisdom of a God of nature, when she has the assured record already in hand, that there exists, at every stage of research, whether carried to the highest or lowest object in the universe, a God who existed before any of His works, and who will reign to all eternity, after the earth and all that is on it shall be burnt up. In this more satisfactory exercise of the powers of his intellect, man is not indebted to, nor accompanied by, a light of his own creation, which may possibly deceive from want of his due attention and regulation; but he is attended with that light which is freely and graciously given to him, for his friend and companion into the utmost bounds and recesses of nature, and which will never lead him astray, nor require any trimming from his hands. Let him, if otherwise provided, soar away into the regions of space, acquaint himself with every system and orb in the heavens, and even mark out the paths of stars yet undiscovered — let him unfold the several coverings of the earth, with all their records of former life and commotion, and, lastly, let him trace the genesis and progress of organic life through all its phases and forms. After these great and arduous objects and labours are achieved, he may and must, from right reason and deduction, evoke the God of nature, in whose attributes of power, wisdom, and beneficence,

he may also luxuriate in all wonder and sentimentality, but yet the mighty and beautiful abstraction will be found eclipsed and superseded by the God of revelation. Besides the attributes of power, wisdom, and goodness, with which the God of nature has been clothed by the enlightened reason of man in latter times, and which are worthy of all adoration and praise, the revealed God still further shows us, that He is inflexible in justice and yet full of mercy; and when moral destruction and evil come under the observation of the student of science, it is the God of Scripture who alone can teach him the causes and the remedy.

Therefore, though it has been said, that religion can afford no aid to natural science, she assuredly can hallow its researches and disquisitions; and while the diligent explorer of science has the direct light from heaven to accompany him wherever he bends his searching eye, he feels his moral being still more enlightened by the God of purity, love, and mercy.

As faith and reason are both the gifts of the great Author of our being, so He has set no bounds to their cultivation and advancement, nor said to either, "Thus far shall man go and no farther" It is true, in their separate progresses, they may diverge, or come to conclusions differing from each other for the time, but this is no more than may be occasionally expected, when we consider the limited powers of man's research and reason, compared with the positive enunciations of God's perfect wisdom. This discrepancy or want of agreement is, moreover, nothing more than an extended illustration of what, not unfrequently, is observed between the reputed very accurate opinions and conclusions of intelligent men, and the subsequent progress and results of science in our own days. We see and we know here but in part, but we shall hereafter see and know, that faith and reason are one indivisible truth.

In speaking of the Relation of Science to Religion, we may remark, that as religion can lend an honour and bestow a hallowed character on natural and physical science, though

she cannot accelerate nor aid its progress and the development of its truths, so can science, without any pretensions of possessing the power to establish the truths of revealed religion, illustrate to the reason of man many of its sublime revelations, and prepare the way, in many cases, for its reception in the heart and affections. Natural religion, however pure and elevated, may be held to be only natural science sublimated to a metaphysic or theoretic abstraction, and therefore it may only be considered as "a voice crying in the wilderness, Prepare ye the way." So, therefore, natural religion, with the facts and phenomena on which it is built, may dispose the contemplative and longing mind to receive and embrace that message of heaven-born truth, which all human research could never discover. Bishop Hall, on this point, has well said, "Human learning well improved makes us capable of divine. There is no knowledge whereof God is not the Author. He would never have bestowed any gift that should lead us away from Himself. It is an ignorant conceit that inquiry into nature should make men atheistical. No man is so apt to see the star of Christ as a disciple of philosophy. If these men [the wise men] had been acquainted with all the other stars of heaven, and not seen the star of Christ, they had had but light enough to lead them into utter darkness. Philosophy without this star is but the wisp of error."—*Contemplations*, vol. iii.

Religion, being a matter of faith and not of observation, needs not to be confirmed by any of the facts and discoveries of science; therefore many persons and tribes are directly, on appeal, it may be said, willing and sincere recipients of the truths of Christianity—their own hearts, from their inward convictions and experience, forthwith yielding a ready assent to the heavenly declaration. There are, however, multitudes of our fellow-men who require to be reasoned down from their own theoretic notions, and to be led up through the God of nature to the God of the gospel. The history of many educated minds in civilised countries, and

the methods that have been found most expedient, if not necessary, for bringing the Brahminical Hindoos, the Chinese, and some other races, to the reception of revealed truths, will show how natural and physical science may and does aid, and prepare the way for that sublimer knowledge, which is beyond the searching of man's reason.

To prepare many classes in these Eastern nations for the reception of religious truth, direct moral appeals to the heart and conscience have little effect, in comparison to the power they have among many of the untutored tribes of Africa and America. Science must therefore be brought in to break up the unfallowd ground of superstition and polytheism, and to begin a rational culture before the precious seed is sown, with any hope of its growth. For this purpose the gift of tongues must be supplied, that all these people may be spoken to in their own language; and the gifts of healing are also necessary to show forth the powers of science and the charities of the Christian religion. For such work are often required the most polished and instructed intellects, and the highest science, in order to open and clear out a soil long preoccupied by false and ignorant notions of the common facts and phenomena of visible nature.

Some men only yield to the conviction of revealed truth through the avenues of their intellect and reason; they love to work out a problem, and the hope of these is, that when they arrive at the *ultima Thule* of their own limited reasoning and deductions, and yet feel their inward man unsatisfied, they may humbly and gladly lay hold of that Hand that will lead them on to scenes of knowledge and happiness, to which they could never of themselves have attained, nor have even contemplated, with the aid of all earthly appliances and science. The relation of science to the religious man may not, then, be overlooked. It ennobles his Christian character in the eyes of his fellow men; for the purposes of usefulness, it adds an ornament to his virtues; and while he keeps his eyes steadfast on the altar of his God, he yet rejoices

to walk among and be conversant with the works of His hands.

To conclude this short and general view of the foregoing important subjects — the employment of a little evening leisure — we have endeavoured to set forth the independent position in which the Christian religion and natural and physical science stand towards each other; and how, we humbly think, these chief and sublime objects of man's intellectual study and pursuits are to be separately viewed and considered — and all without the least injury or prejudice to either, but on the contrary, to the benefit, advancement, and the right understanding of both. Having thus attempted to show their separate independencies, we have also very briefly adverted to some of the principal relations in which they are placed to, and may act upon, each other — and which they must necessarily and more intimately assume, wherever they are rightly traced within the grasp of all possible observation and analogy. As natural and revealed truth can never, of themselves, be opposite to each other, both being from the same great Author, who cannot contradict Himself, we may, then, proceed, with every encouragement and confidence, with our inquiries into the several kingdoms of nature — adding one discovery and fact to another, to magnify and benefit the age in which we live; and while we are thus nobly and usefully employing the talents and reason granted to us by our Creator, we have, however, to take care to create no gods of our own, but ever to look up to the revealed and uncreated God — the source of all power, wisdom, goodness, and mercy.

THE END.

